

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF A NEW TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 5 (LEONARDTOWN ROAD) AND GALLANT GREEN ROAD IN CHARLES COUNTY. A HAZARD IDENTIFICATION BEACON (HIB) WILL BE INSTALLED SOUTH OF GALLANT GREEN ROAD PRIOR TO THE NEW TRAFFIC SIGNAL. MD 5 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA THREE-PHASE, FULLY TRAFFIC-ACTUATED MODE WITH EXCLUSIVE/FLASHING RED PHASING FOR SOUTHBOUND MD 5.

CONTROLLER REQUIREMENTS

INSTALL NEMA SIZE "S" BASE MOUNTED CABINET WITH ASC III CONTROLLER AND ASSOCIATED HARNESSSES. THE SHA SIGNAL SHOP WILL INSTALL ONE (1) VIDEO DETECTION INTERFACE: 1-8 CAMERAS, ONE (1) 4 CHANNEL DETECTOR AMPLIFIER, BATTERY BACK-UP AND ALL OTHER ASSOCIATED EQUIPMENT.

INSTALL TYPE "G" POLE MOUNTED CABINET WITH A 2-CIRCUIT FLASHER FOR THE HAZARD IDENTIFICATION BEACON.

PHONE DROP

THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF SHA AT (410) 787-7635 TO ARRANGE FOR THE PHONE DROP LINE INSTALLATION. THE CONTRACTOR IS TO NOTIFY MR. SNYDER WITH THE NEAREST STREET ADDRESS, ZIP CODE AND PHONE NUMBER.

THE CONTACT PERSONS FOR DISTRICT #5 ARE AS FOLLOWS:

Ms. Kimberly Tran
Assistant District Engineer - Traffic
Phone: 410-841-1013

Mr. Mike Huber
District Utility Engineer
Phone: 410-841-1039

Mr. John S. Mays
Assistant District Engineer - Maintenance
Phone: 410-841-1013

OFFICE OF TRAFFIC AND SAFETY:

Mr. Richard L. Daff Sr.
Chief, Traffic Operations Division
Phone: 410-787-7630

Mr. Robert Snyder
Assistant Division Chief, Traffic Operations
410-787-7630

Mr. Edward Rodenhizer
Chief Signal Operations
Phone: 410-787-7650

Mr. Eugene Bailey
Chief Sign Operations
410-787-7670

The Power Company is:
SMECO
901 Dares Beach Road
P.O. Box 37
Prince Frederick, Maryland
Phone: 410-535-4400

EQUIPMENT LIST 'A'

EQUIPMENT TO BE FURNISHED BY THE SHA.

ITEM NO	QUANTITY	DESCRIPTION
9000	1 EA	CONTROLLER CABINET TYPE 'S' WITH VIDEO DETECTION INTERFACE EQUIPMENT: 1-8 CAMERAS
9000	1 EA	UNINTERRUPTABLE POWER SUPPLY AND EQUIPMENT
9000	1 EA	ASC III CONTROLLER
9012	1 EA	2 CIRCUIT FLASHER
9037	1 EA	CABINET 'G' TYPE POLE MOUNT
9570	14 SF	SHEET ALUMINUM GROUND MOUNTED SIGN 1 EA - R4-8b (24 IN. X 30 IN.) 1 EA - R1-2 (36 IN. X 36 IN.)
9571	69 SF	SHEET ALUMINUM MAST ARM/POLE MOUNTED SIGN 1 EA - M1-5(4) (78 IN. X 36 IN.) "LEONARDTOWN RD, NORTH, MD 5, SOUTH" 1 EA - R10-1(2)MOD (48 IN. X 36 IN.) 1 EA - D-3(1) (96 IN. X 16 IN.) - DUAL FACED "GALLANT GREEN RD" 1 EA - W3-3 (48 IN. X 48 IN.) 1 EA - D-3(1) (96 IN. X 16 IN.) F.Y. "GALLANT GREEN RD"

EQUIPMENT LIST 'B'

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

ITEM NO	QUANTITY	DESCRIPTION
1003	3 EA	MAINTENANCE OF TRAFFIC
2001	13 CY	CLASS 2 EXCAVATION
2002	5 CY	TEST PIT EXCAVATION
5005	95 LF	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
5006	285 LF	5 INCH HEAT APPLIED WHITE OR YELLOW PERM PVMT LINE MARKINGS
5007	115 LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS ANY WIDTH
6001	125 LF	STANDARD TYPE A COMBINATION CURB AND GUTTER 12 INCH GUTTER PAN 8 INCH DEPTH
8006	2 EA	ANY SIZE LIGHTING ARM ON SIGNAL POLE WITH 250 WATT HPS LAMP & LUMINAIRE
8010	1 EA	CONDUIT BEND IN EXISTING FOUNDATION - ANY SIZE
8015	1 EA	MAST ARM POLE & 38 FT MAST ARM ANY 'T' DIMENSION
8016	1 EA	MAST ARM POLE & 60 FT MAST ARM ANY 'T' DIMENSION
8018	2 EA	MAST ARM POLE & 50 FT MAST ARM ANY 'T' DIMENSION
8020	2 EA	NONINVASIVE DETECTOR (ANY LENGTH) LEAD-IN CABLE UP TO 1000'
8021	1 EA	REMOVE & DISPOSE OF MATERIAL & EQUIPMENT (PER ASSIGNMENT)
8025	2 EA	VIDEO DETECTION CAMERA AND CABLE
8033	510 LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - BORED
8035	970 LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - TRENCHED
8036	50 LF	WOOD SIGN SUPPORTS UP TO 4 X 6
8038	83 SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE)
8040	505 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8042	1 EA	METERED SERVICE PEDESTAL EMBEDDED
8043	1 EA	ELECTRICAL UTILITY SERVICE EQUIPMENT 120/240 VOLTS 60 AMPS
8045	515 LF	ELECTRICAL CABLE 1-CONDUCTOR NO. 8 AWG-THHN/THWN
8046	8 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8050	29 EA	12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION
8052	1 EA	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
8056	115 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO.14 AWG)
8057	945 LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO.14 AWG)
8058	590 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG) TC
8064	1 EA	INSTALL CONTROLLER AND CABINET - POLE MOUNT
8065	1 EA	INSTALL CONTROLLER AND CABINET - BASE MOUNT

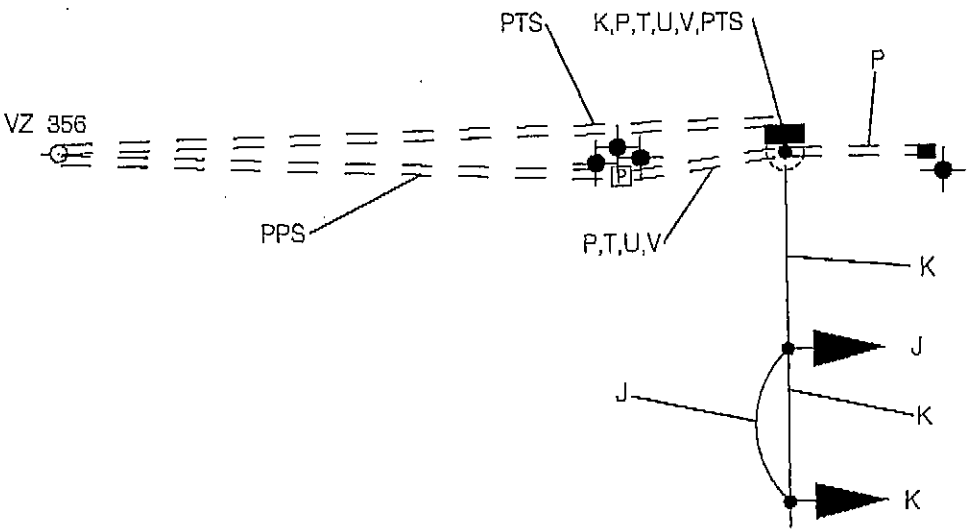
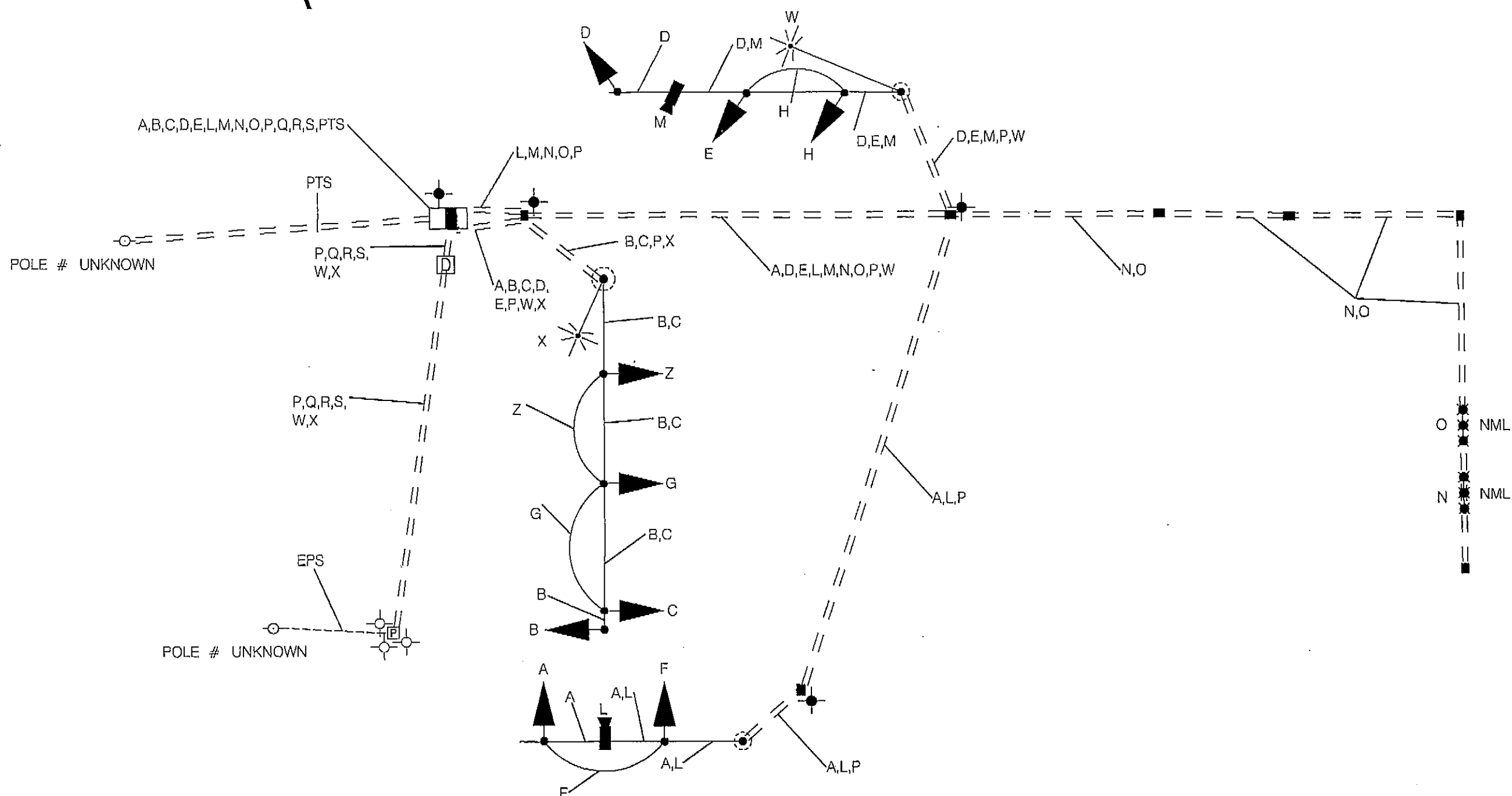
EQUIPMENT LIST 'C'

EQUIPMENT TO BE REMOVED AND RETURNED TO SHA.

ITEM NO QUANTITY DESCRIPTION

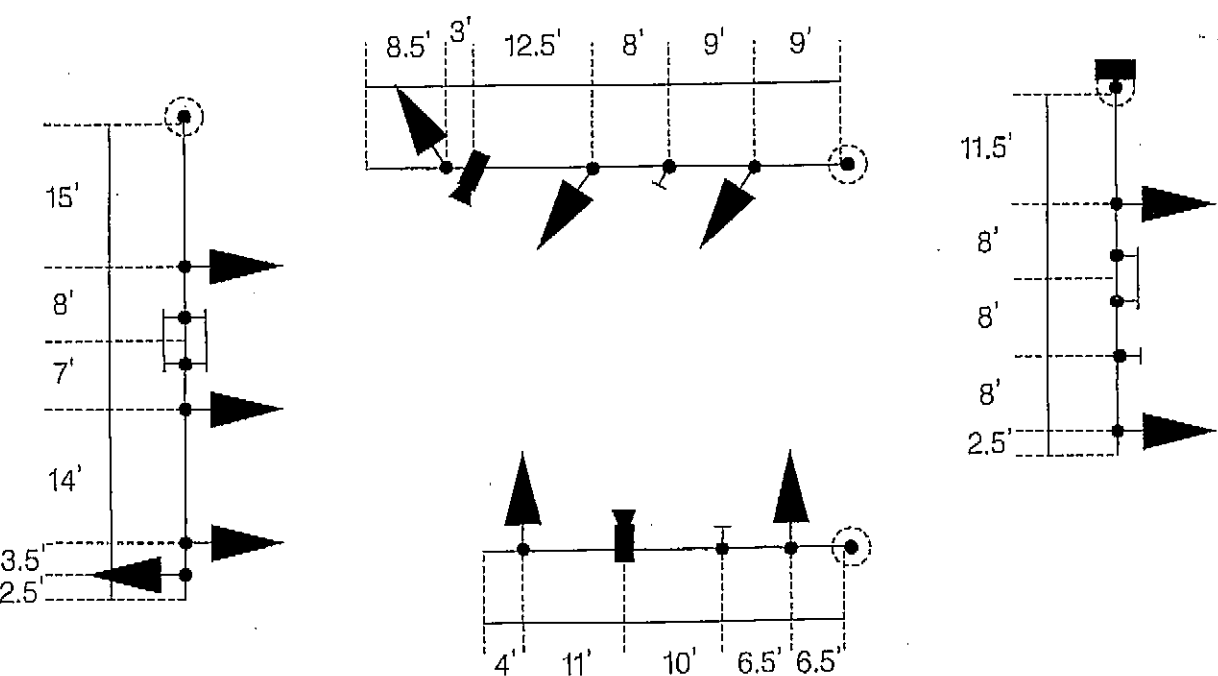
NONE - ALL REMOVED EQUIPMENT SHALL BECOME THE PROPERTY OF THE CONTRACTOR

WIRING DIAGRAM



PROPOSED SIGNAL EQUIPMENT DETAIL

NOT TO SCALE



PHASE CHART	1	2	3	4	5	6	7	8	9	10	11	
	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(Y)	(Y)	
	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	
	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	
PHASE 1	R	R	R	←G	G	G	R	R	R	FLY	FLY	↑
PHASE 1 CHANGE	R	R	R	←Y	Y	Y	R	R	R	FLY	FLY	↑
PHASE 2	G	G	G	FLR	FLR	FLR	R	R	R	FLY	FLY	↑
PHASE 2 CHANGE	Y	Y	Y	FLR	FLR	FLR	R	R	R	FLY	FLY	↑
PHASE 4	R	R	R	←R	R	R	G	G	G	FLY	FLY	↑
PHASE 4 CHANGE	R	R	R	←R	R	R	Y	Y	Y	FLY	FLY	↑
FLASHING OPERATION	FLY	FLY	FLY	FLR	FLR	FLR	FLR	FLR	FLR	DARK	DARK	↑

SHA

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 5 (LEONARDTOWN ROAD) AND
GALLANT GREEN ROAD
HUGHESVILLE, MARYLAND

GENERAL INFORMATION

SCALE NONE DATE 03/01/2012 CONTRACT NO. XX3475185

DESIGNED BY EMP OF STV COUNTY CHARLES

DRAWN BY EMP OF STV LOGMILE 08000503.16

CHECKED BY MTS OF STV TMS NO. L168

F.A.P. NO. TOD NO.

TS NO. 4932 DRAWING SG-02 OF 02 SHEET NO. 02 OF 02

PLOTTED: Monday, March 05, 2012 AT 11:33 AM
FILE: E:\PROJECTS\MD04285\4104285_0167\Drawings\TRA\SG-0200_MDS.dgn

STV
STV Incorporated
7125 Ambassador Road, Suite 200
Baltimore, MD 21244
www.stvinc.com